3. (Amended) Encoding method according to claim 1, characterized in that it enables access to several levels of encoding quality, corresponding to each of said successive meshes.

4. (Amended) Encoding method according to claim 1, characterized in that said successive meshes are obtained by the implementation of a recursive algorithm.

5. (Amended) Encoding method according to claim 1, characterized in that said recursive algorithm comprises the following steps:

(a)   the reception (31) of a wavelet coefficient indexed by a vertex (s) of barycentric coordinates (α,β,γ) on a face F_0;

(b)   for each neighboring face F_j of F_0 containing said vertices (s):

-     $F = F_i$ is supposed;

-     from the barycentric coordinates (α,β,γ), the coordinates of said vertex (s) in the refined base (42) formed by the vertices of the face F, also referenced (α,β,γ) are deduced;

-     if the coordinates α, β or γ are positive or zero and if two of them are strictly positive (43):

  -     the face F (45) is subdived;

  -     the processing of the step (b) is resumed for the four offspring of the face F successively

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8. (Amended) Application of the encoding method according to claim 1 to at least one of the following fields:

- the display of meshed objects in a 3D screen;

- the progressive display of meshed objects in three dimensions on a screen, said wavelet coefficients being taken into account as and when they arrive;

- the display of meshed objects in three dimensions on a screen with at least two levels of detail, one level of detail corresponding to one of said successive meshes (M_i);

- the display of different parts of a meshed object with at least two different levels of detail;

- the compression of a mesh of a meshed object.

REMARKS

The above preliminary amendment is made to remove multiple dependencies from claims 3, 4, 5 and 8.

A new abstract page is supplied to conform to that appearing on the publication page of the WIPO application, but the new Abstract is typed on a separate page as required by U.S. practice.

Applicants respectfully request that the preliminary amendment described herein be entered into the record prior to calculation of the filing fee and prior to examination and consideration of the above-identified application.